APPENDIX XX.

TO THE

SECOND EDITION

OF THE

DESCRIPTIVE CATALOGUE

OF THE

PATHOLOGICAL SPECIMENS

CONTAINED IN

THE MUSEUM

OF

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

BY

SAMUEL G. SHATTOCK,

PATHOLOGICAL CURATOR OF THE MUSEUM.

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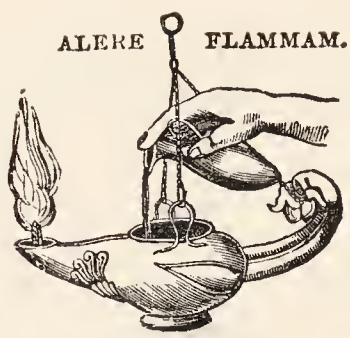

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RED LION COURT, FLEET STREET.

PREFACE.

THIS Appendix contains descriptions of the Pathological Specimens added to the Museum during the year ending July 1st, 1906.

SAMUEL G. SHATTOCK.

July 1906.

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APPENDIX XX.

TO THE

PATHOLOGICAL CATALOGUE.

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14 D. Plaster casts of the feet of a girl, sixteen years of age, exhibiting an enormous overgrowth, which was present to some degree at the time of birth.

The casts were taken from a girl, sixteen years of age, of the average height and otherwise well developed. The left leg is larger than the right. There were some pigmented verrucose patches on the back. The bones of the skull and the upper extremities appeared to be quite normal.

At the time of birth (which occurred at full term), the feet were unusually large,—about six inches in length, the left being larger than the right; at this time, also, the cutaneous condition was present.

Since birth the feet have grown disproportionally to the rest of the body, though less so since the age of fourteen. The other children of the family are perfectly healthy. The father and the mother are normally formed; and there is no family history of gigantism.

The patient was able to get about moderately well, and could even skip. No skiagraph was obtainable.

Presented by W. F. Addey, Esq., 1906.

88 B. The shell of a Snail (*Helix pomatia*), showing the repair of an injury.

A quadrilateral piece, about an inch and a half in diameter, near the base, and involving only the last whorl, has been at some time lost after fracture. The interval is filled with new shell, which projects somewhat irregularly above the general level, and wants the normal colouration

and markings. On the inner aspect the new formed shell, as elsewhere, is smooth, unpigmented, and porcellaneous.

Presented by F. R. E. Wright, Esq., 1906.

230 B. Portion of the left pes of a Wild Cat (*Felis cattus*), showing the results of an injury inflicted with a trap. Three of the metatarsal bones (which want the distal extremities) project in a necrosed state from the stump.

Presented by the Zoological Society, 1906.

319 D. A longitudinal section of a left little toe greatly enlarged by a diffuse overgrowth of fat in the subcutaneous tissue. The enlargement is chiefly, though not entirely, on the plantar aspect, where the fat measures an inch and a quarter in thickness. The bones and tendons are unaffected.

The toe was removed from a gentleman æt. 52. It was first noticed to be enlarging fifteen or sixteen years previously.

[Mounted in 50 % glycerine.]

Presented by H. H. Clutton, Esq., 1906.

732 F. The left fore limb of a pure bred Dachshund puppy, thirteen weeks' old. The bones are firmly ossified, but the shafts show the extreme shortness characteristic of the breed, which in this respect is cretinoid, although the skull does not exhibit any abnormality of form.

Presented by S. G. Shattock, Esq., and C. G. Seligmann, Esq., 1906.

732 G. The bones of the right hind limb of the same Dachshund puppy as the preceding, showing the extreme shortness of the shafts of the femur and of the tibia and fibula.

Presented by S. G. Shattock, Esq., and C. G. Seligmann, Esq., 1906.

The following specimens, obtained from British New Guinea, were given to the College by Mr. C. G. Seligmann, by whom they were collected.

They present lesions in every way corresponding with such as are indubitably syphilitic (see the specimens Nos. 1133, 1134,

1331, to which a direct history of syphilis is appended). The bones are those of natives, and the changes shown are in many instances of a severe type.

In most the disease takes the form of nodal swellings varying in extent and elevation. As a proof that these are not due to purely local conditions, it may be observed that the surface of the bone between and beyond such nodes presents in every case the obvious marks of diffuse, ossific periostitis. In no case has the localized formation the sharp or overhanging edge, or the general flatness of surface seen in such as are formed in the base of chronic ulcers.

In many instances the elevations are the seat of caries, such as is found in proper syphilitic lesions. And, what is of greater importance, in three examples the corresponding bones of the two sides are affected (the ulnæ and the tibiæ), if not absolutely symmetrically, in an almost exactly equal degree.

If the lesions are not regarded as due to syphilis, they can only be ascribed to a disease hitherto not met with, which produces similar osseous changes.

The following three bones were obtained from Kwaiwata, a small island in the Marshall-Bennet group off South-Eastern New Guinea.

1234 A, B. Two ulnæ from the same person. The right presents, a short way below the olecranon, a distinct elevation or node about an inch in length, which involves both the inner and posterior surfaces and the posterior border of the shaft. The lower half of the bone is more extensively enlarged, the enlargement involving it on every aspect for a length of two and a half inches; posteriorly the node presents two deep carious pits.

The shaft of the left ulna immediately above its middle presents an elongated swelling or node, about three inches in length, which involves the whole of the bone with the exception of its anterior surface.

Presented by C. G. Seligmann, Esq., 1906.

1234 C. A fibula from the same locality, and possibly from the same person. A short way below its middle, there is a

node on the outer surface about an inch and a half in length, the enlargement involving, also, the border, and, to a slight degree, the posterior aspect. The new bone and the shaft beneath are deeply excavated by caries.

Like the two preceding the bone is blotched with bright green, from what microscopic examination shows to be a growth of protococcus.

Presented by C. G. Seligmann, Esq., 1906.

The following bones were obtained from Murua (Woodlarks), from cliff exposures, about seven miles east of Mapas Island, off the coast of Murua.

1234 D, E. Two tibiæ, apparently from the same person. The shaft of each is extensively diseased and in about an equal degree, though not in a symmetrical manner. In the right there is a prominent node about three inches in length, involving the subcutaneous and posterior aspects of the bone immediately above its middle. On the lower half of the shaft there is a second node, of about the same extent, which involves mainly the inner, subcutaneous surface. Each of the nodes is deeply pitted with carious, and probably suppurating, cavities : the lower is extensively excavated, and was probably the seat of some necrosis. Where not raised in distinct nodes, the surface of the shaft nearly everywhere bears the marks of a slight periostitis, being thinly encrusted with a longitudinally grooved layer of new osseous tissue, the posterior surface between the nodes being the least affected.

The left tibia bears four distinct localized eminences or nodes which involve chiefly the inner surface and crest. The highest, and smallest, lies about an inch below the tubercle ; the next, about the same distance below this, produces a pronounced elevation of the crest, and involves both the inner and the outer aspects of the shaft. To this succeeds the largest, which implicates the inner and posterior aspects, and measures three inches in vertical extent. Below this, two inches from the lower articular end, is a fourth node limited to the subcutaneous aspect and hardly more than an inch in length. As in the opposite

bone, each of the nodes is excavated by caries. The surfaces between the nodes are in several places covered with a thin longitudinally grooved layer of new osseous substance.

Both the bones are discoloured from a growth of protococcus. *Presented by C. G. Seligmann, Esq.*, 1906.

1234 F, G. Two tibiæ from the same subject. In each, the shaft is diffusely thickened and the sharpness of the crest destroyed from periosteal inflammation. The disease, though equally extensive in the two bones, is not strictly symmetrical.

In the left, a short way above its middle, the new tissue takes the form of a distinct node which involves both inner and outer aspects for a distance of about two inches, the eminence being more marked on the subcutaneous aspect than elsewhere. Below this, the form of the shaft is scarcely altered for about three quarters of an inch, but beyond this it presents a diffuse enlargement which involves all three surfaces and reaches almost as far as the lower articulation. There is no disease of either the lower or upper articular surface itself, or of that for the head of the fibula.

In the right tibia, the enlargement of the shaft is nowhere so prominent as in the left, and is limited to the upper two thirds of the bone, which is involved on all its three aspects. *Presented by C. G. Seligmann, Esq.*, 1906.

1234 H. A right tibia from the same locality as the four preceding. For nearly its whole length the shaft is thickened from ossific periostitis, the posterior surface, however, presenting scarcely any trace of disease except for about three inches near the lower articular end. For the upper half or more of the shaft a strip near the posterior border of both the inner and the outer surfaces has almost escaped, and offers no other change than a thin incomplete formation of longitudinally grooved osseous substance : the real enlargement affects the form of a greatly elongated node, which renders the crest more prominent than natural and has destroyed its normal sharpness.

On the inner, subcutaneous aspect and over its anterior border the new bone producing the enlargement is pitted from caries.

Both the articular surfaces are quite normal.

Presented by C. G. Seligmann, Esq., 1906.

1234 I. A left fibula, possibly from the same subject as the preceding right tibia. The shaft is enlarged throughout from periosteal inflammation, the only strip unaffected, or almost so, being the internal surface over an area corresponding with the origin of the tibialis posticus.

On the outer surface, the superadded bone about the middle of the shaft is deeply pitted in many spots from caries.

The articular surfaces are normal.

Presented by C. G. Seligmann, Esq., 1906.

1936 C. The chief portion of a right semilunar cartilage, removed by operation from the knee-joint. Projecting from the outer, attached border there is a somewhat hemispherical swelling, which extends for about an inch along the cartilage, and attains a maximum eminence of about half an inch. Small portions of the synovial membrane have been raised by dissection from both the upper and lower aspects of the enlargement.

As seen in the divided surfaces, the swelling consists of a series of well-defined spaces, which, in the recent state, were filled with a thick transparent mucoid material. The smallest spaces appear as clefts between the bundles of white fibrous tissue at the periphery of the fibro-cartilage, and seem to have arisen from a mucoid softening of the tissue, and not in any way to be connected with the attached portions of synovial membrane.

From a man, æt. 30, who slipped and fell down, injuring the right knee, four months before coming under observation. About a month later he noticed a swelling on the outer side of the joint: this slowly increased and troubled him in walking; it was especially uncomfortable at night and in the morning, without ever causing actual pain. On examination, there was found a swelling as large as a small filbert over the right external semilunar cartilage just in front of the external lateral ligament; it

was fixed to and moved with the tibia, and was not affected by contraction of the biceps femoris. The movements of the joint were smooth, and the other structures of the knee felt normal. There was no affection of any other joint, and no family history of gout or rheumatism. The parts shown were removed by longitudinal incision over the swelling. The swelling was wholly inside the capsule of the joint. The wound healed by first intention, and the function of the joint was afterwards perfect.

[Mounted in 50 % glycerine.]

Presented by Percy Furnivall, Esq., 1906.

2340 A. Portion of the small intestine, with the cæcum &c. of a cat.

Attached superiorly to the mesentery about an inch from the gut, there is an extremely slender filiform process two and a half inches in length, which bifurcates below, and completely, though loosely, surrounds a portion of the small intestine, one of the two divisions being attached to the mesentery in front of, and the other behind, the second portion of intestine referred to.

The death of the animal was not in any way connected with the presence of the band shown in the specimen.

Presented by J. D. Malcolm, Esq., 1906.

2375 A. A sample of chyle-like ascitic fluid, removed by tapping.

A chemical and microscopic examination showed the milkiness to be due to the presence of albuminous molecules, and not to fat.

From a patient (H. G.), æt. 39, admitted into St. Thomas's Hospital under the care of Dr. S. J. Sharkey, April 1905, suffering from what was diagnosed as cirrhosis of the liver.

The fluid withdrawn from the abdomen resembled milk; it was alkaline, and had a sp. gr. of 1016. Microscopic examination showed the presence of white and red cells in small numbers. The fluid was found to contain a large quantity of albumen, becoming solid on boiling with the addition of acetic acid. Urea was present in the proportion of two grains to the ounce. Fehling's solution was reduced. No fat and no cholesterin were found; a large number of granules were deposited on centrifugalisation, but these gave no red colour with "scharlach."

A second amount was withdrawn on April 12th, 1905. Like the first, it gave no evidence of fat. Saturation with magnesium sulphate precipitated all the proteids, the filtered fluid being clear. Albumen and globulin were present in about equal proportions.

On digesting with trypsin at 37° C., albumoses and peptones were found. After filtration through a Chamberland candle, the clear filtrate, on boiling with the addition of acetic acid, showed only a slight trace of albumen; both carbonate and phosphate were present, and urea in the proportion of two grains to the fluid ounce. Crystals of phenyl-glucosazone were obtained.

On agitation with ether, and allowing to stand for twelve hours, the turbidity was removed, the fluid gradually becoming gelatinous. The ethereal extract showed the presence of fat in very small quantities. On saponifying the original fluid, very small globules of fatty acid were set free by hydric sulphate. Xylol and chloroform produced a very dense precipitate. Two other tappings appear to have been carried out, but the fluid was not typically milky.

Presented by St. Thomas's Hospital, 1906.

2381 c. A Murphy's button, which was removed by gastrotomy five and a half years after it had been used in an anterior gastro-jejunostomy.

At the operation the artificial opening was not found at all contracted.

Presented by A. Pearce Gould, Esq., 1906.

2461 a. Two pieces of colon, the mucosa of which is raised in small polypoid excrescences, many of them like grossly enlarged villi of the small intestine, the specimen being a good example of the condition classed as Colitis polyposa. There are nowhere any signs of ulceration; the muscular coat is intact. On many of the outgrowths the orifices of the intestinal crypts are clearly visible.

Histologically the elevations consist of mucosa covered with intact epithelium, and containing an abundance of crypts of abnormal length and complexity, some being distinctly branched.

From a woman, æt. 21, admitted to the Leicester Infirmary, Jan. 16th, 1904. The patient had suffered severely from syphilis, and had given birth to an illegitimate child; this was followed by a septic condition of the passages, and suppuration of Bartholin's glands. For six weeks she had experienced pain in the abdomen, coming on shortly after taking food, and continuing for about an hour and a half; during these attacks she frequently vomited. She suffered alternately from diarrhœa and constipation, and occasionally passed blood in the stools. Death took place on Jan. 23rd from exhaustion, the patient being unconscious for some hours before death.

At the autopsy, no gross disease of any of the viscera was discovered. The small intestine was normal. The polypoid excrescences were longest in the transverse colon, and were less thickly distributed in the rectum.

(F. Pope. Brit. Med. Journal, July 23rd, 1904, p. 180.)

[Mounted in 50 % glycerine.]

Presented by Dr. F. Pope, 1906.

2544 C. Portion of ileum with a Meckel's diverticulum. The persistent portion of the vitelline duct is two inches in length and half an inch in diameter. Its free end is enlarged and bulbous, and the mucosa here presents a series of deep ulcers.

To the lower side of the enlarged end there is connected a thickly-walled irregular cavity about three quarters of an inch in diameter, which has no continuity with the lumen of the diverticulum, and possibly represents an inflammatory sac of new formation which has formed around a localized escape of the diverticular contents into the subperitoneal tissue from a perforation arising in connection with one of the ulcers. There is an ulcer in the ileum itself near the mouth of the diverticulum.

Microscopic examination of the sac in question show its walls to consist chiefly of fat without muscular tissue or mucosa, the cavity being lined with granulation tissue. The presence of giant cells in connection with the lesions of the proper diverticular wall indicates that the nature of the primary disease is tubercular. *College Stores*, 1906.

2559 F. Four minute concretions, in connection with each of two of which there is a fine straight hair, the longer of which is three-eighths of an inch in length.

From an unmarried woman, æt. 24, admitted into St. Thomas's Hospital under the care of Mr. W. H. Battle, Jan. 1904. There was a history of recurrent attacks of pain in the region of the appendix, accompanied with fever and sickness. During the last six weeks she had been free from pain only for a few hours. At the operation, little or no alteration was perceptible in the appendix itself. Recovery was uninterrupted.

Presented by St. Thomas's Hospital, 1906.

2808 B. A much contracted gall-bladder, measuring only an inch and a half in length, but nearly half an inch in diameter. With the exception of a spherical space hardly more than a quarter of an inch in diameter, the cavity is obliterated. The cavity in question communicated by a fistula with the duodenum.

The patient was a lady, æt. 55, who ten years before operation had suffered from severe attacks of pain in the region of the gall-bladder, unassociated with jaundice. After a severe seizure, accompanied with fever, and swelling beneath the right costal margin, the patient expericnced relief for some time; but during the past year the paroxysmal pains had recurred, and a sense of discomfort persisted during the intervals. When the patient was seen by the donor in Nov. 1904, there was a tender swelling in the region of the gall-bladder.

At the operation (Dec. 1st, 1904), after detaching adhesions, a fistula between the gall-bladder and duodenum was discovered. The gall-bladder was removed, the cystic duct ligatured, and the opening into the duodenum closed. The patient made a good recovery. The paroxysmal pain referred to in the history appears to have been due to contraction of the fistula and the temporary retention of mucus in the cavity shown in the preparation.

Presented by A. W. Mayo Robson, Esq., 1906.

2830 N. A gall-bladder enlarged by distension so as to measure four and a half inches in length and about two and three quarters in transverse diameter. In the dilated cystic duct there is impacted an oval calculus about the size of a small walnut.

The gall-bladder with the calculus *in situ* was successfully removed from a middle-aged woman who had for some time complained of vague pain across the abdomen.

Presented by F. S. Eve, Esq., 1906.

2830 O. A slightly enlarged gall-bladder in which a calculus is lodged immediately above the cystic duct. At the opposite end there is shown the track of a fistula which resulted from a previous cholecystotomy.

The patient, a lady, æt. 36, had suffered from attacks due to gall-stones since the age of thirteen, but had never been jaundiced. In August 1904, whilst in South Africa, the gall-bladder was opened; as pus was found, the ducts were not explored.

No bile flowed from the opened gall-bladder for six weeks; but after an attack of vomiting, bile was observed to come from the

fistula, and this it continued to do. On Nov. 28th, 1904, exploration was carried out by the donor, when the gall-bladder was found distended, with a calculus at the cystic duct. The duct was ligatured, and the gall-bladder with the fistula removed.

[Mounted in 50 % glycerine.]

Presented by A. W. Mayo Robson, Esq., 1906.

2830 P. A gall-bladder removed by operation. In the wall on the right-hand side, about an inch and a quarter from the fundus, there is the linear cicatrix of a previous incision. The cicatrix, which is marked between two pieces of pink glass rod, is about half an inch in length; the mucosa around is finely puckered in lines converging to the scar.

To the interior of the viscus there have been artificially secured three silk ligatures, partially encrusted with calcareous material, which were found loose in the cavity into which they had been discharged during the healing of the incision of which the cicatrix is shown.

From a woman, æt. 52, who had had jaundice when five years old, and had suffered from pain and "indigestion" until the age of thirteen. When seventeen the patient for ten weeks was the subject of abdominal pain, and the presence of gall-stones was diagnosed. In 1899 the abdomen was opened for appendicitis, and at the same time thirty-six biliary calculi, from a quarter to half an inch in diameter, were removed from the gall-bladder; the incision made into the latter was sutured and the bladder returned to the abdominal cavity.

The patient remained well until Dec. 1904, when persistent pain in the region of the gall-bladder set in; this was accompanied with obstinate constipation. On April 10th the gall-bladder was exposed by operation, and by means of a cannula some bile-stained fluid was removed, the viscus being then excised. On opening the bladder, the débris of a calculus, together with three silk ligatures, were found.

[Mounted in 50 % glycerine.]

Presented by J. D. Malcolm, Esq., 1906.

2836 C. Half of a multilocular tumour which was removed from the back of the pancreas, from which its chief blood-supply came. The growth is of spheroidal form, lowly lobulated, and measures about four and a half by three and a half inches in its chief diameters. The cysts of which it is almost entirely constructed vary in size, the

largest of the whole being about three inches across. Between a few, sharply edged apertures of communication exist, these being due apparently to partial disappearance of the intervening walls. Between certain of the cysts there occur areas of more solid tissue, though such are nowhere of any considerable extent.

The other half of the specimen was used for microscopic purposes. From this two of the chief portions of solid tissue, having the general character of those shown in the half preserved, were selected for examination.

One of the microscopic preparations was cut so as to include portion of a cyst: the latter was lined with an epithelium of columnar cells. The solid pieces themselves differed somewhat in structure. In one the substance was fibrous, with glandular spaces in process of cystic distension. Some of the proper glandular tissue suggested that of the pancreas. In places, however, it was quite atypical, the cells, which were of large size (and not compressed from cirrhosis), being devoid of any true glandular order, and disposed in solid groups suggestive of a carcinomatous lesion. The latter indication was confirmed in the sections of the second piece of solid tissue, a triangular area about three quarters of an inch along each of its sides.

The tumour was removed from a married lady, æt. 50, the mother of three children. A swelling was first noticed by the patient about six months ago. On examination, a prominent tumour of irregularly spheroidal shape was found; it was slightly mobile towards and from the loin, and lay chiefly below the ribs to the left of the middle line, extending inferiorly about two inches below the navel. A diagnosis of malignant tumour in a displaced left kidney was made. On April 26th, 1905, the tumour was exposed by an incision on the outer side of the left rectus muscle. It was found to be retro-peritoneal, and when the posterior layer of peritoneum was divided above the colon a normal kidney was found in the proper position. The tumour, over which there were very large vessels, was most fixed towards the left side of the spine. The pancreas lay on the front of its upper portion, being so twisted that the proper anterior surface was superior and almost horizontal. About a fifth of the length of the pancreas was free to the left of the growth; the adjoining part of the gland was attached to it. There were some large vessels posteriorly where the tumour was close to the wall of the

abdomen, but many vessels came from all quarters. The chief blood supply, however, appeared to come from the pancreas, and the manner in which the latter was twisted seemed to indicate that the growth had developed from its posterior surface.

In order to get the tumour away more easily the pancreas was cut into. A drainage-tube was placed in the loin, and the wound was closed.

On the sixteenth day there were symptoms of intestinal obstruction. The abdomen was again opened, and the transverse colon found to be greatly distended, there being an acute kink at the splenic flexure. A free anastomotic communication was thereupon made between the transverse and descending colon. Complete recovery ensued.

Presented by J. D. Malcolm, Esq., 1906.

2906 F *a*. Portion of the left lobe of a thyroid gland which was removed during life. In its centre there is the spherical cavity of a chronic abscess about half an inch in diameter. The tissue around the cavity is, for a considerable distance, devoid of thyroid structure, and is constituted by somewhat dense inflammatory tissue in which microscopic examination showed the presence of giant-celled systems.

From a strong, healthy-looking country labourer, æt. 21, who lived at Aspatria, a goitre district in Cumberland. The left lobe of the thyroid gland was moderately enlarged; and the elasticity of the "tumour" was thought to indicate the presence of fluid in a cyst. After removal, an ounce or more of sero-purulent fluid escaped from the cavity on section. No cultures could be raised from the contents. No tubercle bacilli were demonstrable in sections, though the lesion is most probably tubercular.

(Trans. Path. Soc. vol. lvii. p. 153.)

[Mounted in 50 % glycerine.]

Presented by Dr. H. A. Lediard, 1906.

3365 A. A vertical section of the right lung of a child, showing the results of congenital syphilis. The organ is solid throughout and of a dull white, only the chief vessels and bronchia being recognizable in the section.

Microscopic examination shows a diffuse interstitial inflammation, accompanied with catarrhal proliferation within the alveoli, which are filled with epithelial and round cells. There was no pleurisy: the liver and spleen were enlarged.

From a single woman, admitted into Queen Charlotte's Hospital for her first confinement. No history of syphilis was obtained, nor were there any signs of that disease whilst the patient remained in the hospital. The child was nearly or quite at full time, but was very small. It lived only fifteen minutes.

There were spots on the body, and bullæ on the arms and legs; the hands and feet were in parts denuded of epidermis.

(A. W. Sikes. 'The Journal of Obstetrics and Gynæcology of the British Empire,' March 1905.)

[Mounted in 50 % glycerine.]

Presented by Dr. A. W. Sikes, 1906.

3645 E. A sample of urine which was turbid when passed, solely from the presence of the colon bacillus, the micro-organism having now subsided to form a somewhat close whitish sediment.

From a gentleman, æt. 58, suffering from vesical catarrh, probably of gouty origin, and which had resisted all treatment. Until this he had always been a healthy man with the exception of a tendency to eczema. There was no history of alcoholism or syphilis, and there were no constitutional symptoms. The present trouble (June 1905) dated from an illness of a year and a half ago. Nothing definite could be ascertained as to the nature of this except that it confined him to bed for about a week, was attended with moderate fever and marked urinary symptoms of which there had been no previous experience. Strangury was followed by retention, for which a catheter had to be used. Since then the patient has never been free for any length of time from similar trouble. He complained mainly of a sense of discomfort, at times amounting to pain, referred to the perineum and hypogastrium. Micturition was frequent,—three or four times in the night or more, and painful. The urine was described as being generally thick when passed and often very strong-smelling.

On examination no physical signs of disease were discoverable beyond the remains of an eczematous eruption, and rather high arterial tension. The urine was strong-smelling, amphoteric, sp. gr. 1020, and showed a very evenly diffused turbidity unaffected by reagents. From the urine the colon bacillus was obtained in pure culture by Mr. L. S. Dudgeon, who found that the micro-organism was agglutinated by the patient's blood-serum in a dilution of 1–100. The bladder was washed out with weak boracic acid three times a week, and fifteen grains of urotropin were given three times a day. Some improvement in the character of the urine took place, but no relief. On August 22nd one of the exacerbations of which the patient complained, occurred. In these attacks there was great pain in micturition and a change in the appearance of the urine; a sample of the latter was found to contain pus in some quantity. On passing a sound, it was

discovered by rectal examination that the prostate was non-existent. No further treatment was thought to be indicated.

[The specimen has been preserved by the addition of formol.]

Presented by Dr. H. G. Turney, 1906.

3671 A. A somewhat pyriform sacculus about an inch and a quarter in length, and, where broadest, five eighths of an inch in diameter, which projected into the bladder from the neighbourhood of the left ureter. It contains two calculi with crystalline surfaces ; a third, which lay above those shown, and which with them quite filled the cavity, was removed for chemical examination. The neck of the sacculus is charred from its having been divided by means of the cautery. Both the interior and the exterior of the sac are covered with a smooth membrane, but close examination revealed no aperture corresponding with that of the ureter in any part of the wall.

Microscopic examination of the central portion of the sacculus shows it to consist of connective tissue, in the more central part of which lie bundles of unstriped muscle-fibre. On the vesical aspect the connective tissue is invested with a somewhat thick epithelium, of which the deepest cells (when the covering is thickest) are in places set vertically to the subjacent surface ; these are succeeded by polymorphous elements, and these again by flat cells in many layers. On the opposite aspect the connective tissue forming the surface is devoid of epithelium : the number of cells in it is abnormally large, and the surface itself is covered with a thin layer of clot or exudation. The absence of epithelium is perhaps to be explained by the inflammatory process set up by the presence of the calculi.

The sacculus possibly represents portion of one side of the ureter which has prolapsed into the bladder after the impaction of the calculi in it, the ureteral orifice having probably lain near the base of the protrusion. The calculus examined consisted of phosphate and oxalate of lime ; no ammonium or magnesium was present, and no uric acid.

From a man, æt. 30, whose urinary trouble began six years before his admission into the Westminster Hospital.

His symptoms were occasionally prolonged micturition, which might occupy ten minutes, and incontinence at times during the night. On catheterisation, obstruction was encountered in the prostatic urethra; and on bimanual examination a swelling was discovered above the left lobe of the prostate. A hard, but not a ringing body was felt with the sound. The physical signs were, however, inconstant, and present only when the sacculus was engaged in the prostatic urethra.

Perineal section was carried out, and the finger having been passed into the bladder, a pedunculated mass was felt which moved freely about, and somewhat resembled a vermiform appendix with a contained calculus. The mass was drawn downwards into the dilated prostatic urethra, when it was found to consist of a sac in which three calculi were tightly packed. The pedicle was about the thickness of a lead-pencil, and was attached on the left of the trigone near the urethral orifice. The prostate was found to be normal.

(W. G. Spencer, Clin. Soc. Trans. vol. xxxix.)

[Mounted in 50 % glycerine.]

Presented by W. G. Spencer, Esq., 1906.

3679 B. The base of a bladder, etc, the anterior portion of the prostate being cut away. The ureters are marked with rods of white glass, the vasa deferentia, with black bristles; a bristle, also, has been inserted into the uterus masculinus.

The whole of the vesical mucosa has been destroyed by ulceration or sloughing, with the exception of a strip which passes from the termination of the left ureter to the urethra in connection with Bell's muscle: the latter for a certain distance is undermined and isolated from the subjacent muscular wall of the bladder.

At the back of the preparation the left vesicula seminalis and the vas deferens as far as the base of the prostate have been dissected out: the vas is not in any way conjoined with the left ureter.

Microscopic examination shows the free surface of the vesical wall to be covered with a layer of granulation-tissue.

From a man who died of syncope whilst in a cab, on his way to the Middlesex Hospital. The patient was thought to be suffering from hæmaturia due to the presence of a papilloma.

Presented by A. Pearce Gould, Esq., 1906.

3695 A. A papilloma, longitudinally divided, which was removed from the bladder. The new growth is about an inch and three quarters in its chief horizontal axis.

A portion of the muscular wall of the bladder has been removed with the tumour, which, however, does not invade the muscular tissue.

The growth was attached to the left side of the base, close above the trigone, in a man æt. 65, who had suffered from hæmaturia, and pain in the left loin, but from no increased frequency of micturition.

[Mounted in 50 % glycerine.]

Presented by F. S. Eve, Esq., 1906.

3706 C. The left half of a pelvis with the bladder and rectum.

In connection with the bladder there has grown a tumour which has extended in an unusual manner beyond the viscus itself, and involves the bones of the pelvis. The cavity of the bladder is but little encroached upon, and much of the alteration of the mucosa appears to be of an innocent papillary kind. In the section of the anterior wall, towards the summit of the viscus, the muscular wall is invaded and destroyed, although the mucosa in the precise plane of section is intact.

From the anterior wall of the bladder, the summit of which lies against the promontory of the sacrum, a huge spheroidal growth projects forwards for about three inches. The prostate gland is quite uninvolved.

There is no trace of the symphysis in the section, the body of the pubic bone having been invaded and destroyed by the growth, although its form is still recognizable in front of the main tumour, from which it is separated by a line of periosteum.

Laterally the growth fills the pelvis, above the brim of which it rises, and in the situation of the horizontal rami of the ischium and os pubis it forms a second prominent eminence, the median extension of which appears in the divided surface, in the situation of the symphysis already referred to.

Inferiorly this growth encroaches upon the obturator

foramen, and is continuous with a further extension which involves the descending pubic ramus and the whole of the ischium with the exception of a small portion in the vicinity of the acetabulum.

The central portion of the acetabulum itself has been replaced by the growth, there being a complete absence of bone (as told by puncture) in this position.

In addition to this, there is a further tumour of large size which involves the posterior part of the ilium, filling the greater sciatic foramen and implicating the sacrum, portion of which has been completely replaced by the new growth; the middle portion of the rectum, though displaced forwards, is not affected.

Histologically the neoplasm is a typical carcinoma with a considerable amount of stroma.

J. W., æt. 31, first seen on Feb. 1st, 1904, when he stated that he had noticed slightly increased frequency of micturition for about five months, which had gradually increased until it became by day hourly.

Two months previously he had passed a small blood-clot in the urine, and again a week later, since which time the urine had been occasionally blood-stained. For the last month he had noticed that during micturition the flow had at times suddenly stopped, and on recommencing was tinged with blood.

On examination the prostate, vesiculæ, and testes were found to be normal. No infiltration of the base of the bladder was felt by the rectum. On micturition clear urine was first passed, and this was followed at the close by bright blood

The bladder was washed out, and on cystoscopic examination a large pedunculated growth covered with stunted processes was seen on the right side of the base of the organ. The orifices of the ureters were free.

On Feb. 3rd suprapubic cystotomy was performed. A large friable villous carcinoma was found growing from the right side of the base, which was itself infiltrated around. This was removed, but resection was impracticable. The bladder was drained by a suprapubic tube. The patient made a good recovery, all the urine being passed by the urethra on Feb. 22nd; micturition, every three hours by day, and once by night.

March 9th. On rectal examination, there was discovered increased resistance of the base of the bladder; some small lymphatic glands were felt in the lateral pelvic space. On cystoscopic examination, the right side of the base was found to be infiltrated with carcinoma; there were raised areas with stunted processes covered with mucus on the right margin of the malignant ulcer.

June 24th. The patient was seen for a small superficial abscess in the abdominal scar. The urine was offensive and contained much mucus. On rectal examination, the infiltration of the base of the bladder was found to have extended.

July 16th. A mass of growth could be felt above the pubes beneath the scar. By the rectum a mass as large as a cricket-ball could be made out bimanually. The pelvic glands were further enlarged.

The patient was at this time complaining of aching pain down the back of the right thigh, over the right groin and over Scarpa's triangle; no pain in the course of the long saphenous nerve.

During August and September the patient became rapidly worse, and very emaciated; he complained of severe pain in the lower extremities and of frequency of micturition. Two large soft masses appeared over the posterior iliac spines.

Death took place from exhaustion on Oct. 14th.

No metastatic growths were found after death in the viscera, or other parts of the skeleton.

Presented by R. M. Pooley, Esq., 1906.

3771 A. Half of a tubercular formation, two inches in extreme diameter, which was successfully removed from the cerebellum of a child. The mass, which is for the most part necrotic or caseous, has a coarsely lobulated exterior, over one of the eminences of which a thin layer of the cerebellum is recognizable. Around the caseous mass, microscopic examination shows a zone of inflammatory tissue containing closely-packed giant-celled systems.

From a male child, about five years of age, admitted into the Hospital for Sick Children, Great Ormond Street, under the care of Dr. Colman, May 4th, 1905. Three months previously the patient began to suffer from pains in the head, chiefly at the back, accompanied with vomiting. Between the attacks of pain, the child slept day and night. The head was held over to the left side. On admission the cerebellar region seemed to bulge unduly on both sides, but more so on the left; no tenderness or pressure on percussion. Sensation normal. The left upper limb is weaker than the right; manifest want of co-ordination in the movements of the left arm; slight in those of the right. The gait is unsteady, the feet being placed wide apart, and the arms kept in constant motion to maintain equilibrium. He falls to either side indifferently. Slight internal squint on the left side. Pupils rather dilated; react both to light and to accommodation. No optic neuritis. The use of potassium iodide was without result.

Operation, first stage, June 22nd. Bone removed over the left cerebellar region, as high as the horizontal and as far forward as

the vertical portion of the sigmoid sinus. Through the thin bulging dura mater the cerebellar convolutions could be plainly seen. Second stage, June 24th: the flap of soft tissues was thrown down; the exposed area had a clear transparent appearance. A flap was cut in the dura, when clear œdematous cerebral tissue bulged through. A "tumour" was felt, and slowly enucleated from the interior of the left lobe of the cerebellum. Progress, July 20th: there has been occasional vomiting, and rise of temperature since the operation; wound soundly healed. Aug. 4th: inco-ordination still manifest in both arms; nystagmus, which was worse just after the operation, is better, though still present. Sept. 8th: has learnt to walk. Nov. 5th: the inco-ordination of the right arm has improved; that of the left is the same; walks with a stiff gait. March, 1906: patient quite well.

Presented by C. A. Ballance, Esq., 1906.

3778 F. The left hemisphere of the cerebellum of a child, in which there is a large, partially collapsed, simple cyst.

At its lower anterior part the cyst opens on the surface by a wide track, which represents the artificial opening made to drain it during life.

From a child, æt. 6½ years, admitted into Great Ormond Street Hospital, May 26th, 1905, under the care of the donor. In Oct. 1904 he received a blow behind the left ear, to which succeeded headache that kept him awake all that night. After Christmas he began to have headache and vomiting at intervals, the vomiting having, apparently, no relation to food; his left eye was noticed to squint. Six weeks before admission the patient had a bad fall, and was unconscious. Since then, he had been giddy, unable to walk without staggering, and his pupils have become dilated. There was nothing in the family history to suggest either tubercle or syphilis. On admission, there was no tenderness on pressure or on percussion of either cerebellar region. Inco-ordination was present to an equal extent in both arms: there was marked inco-ordination in both legs in walking. The gait was very unsteady, the feet being placed wide apart, and moved with uncertainty. The patient could walk quickly or run, but with a tendency to deviate to the right.

The right ear was approximated to the right shoulder; the face was turned towards the left, and the chin elevated. Knee-jerks increased and equal; no patellar clonus. There was well-marked left internal squint. No nystagmus. Both pupils widely dilated, but equal; they react equally, sluggishly, and incompletely to strong light, but not to accommodation. Optic neuritis was present on both sides; more marked on the left. Vision was so much impaired that the patient could not count fingers at three feet. Hearing not affected.

Operation.—First stage, June 15, 1905: the bone over the right occipital region was removed; it was very thin. The dura bulged strongly, but appeared healthy.—Second stage, June 24th: the dura was incised, and the right half of the cerebellum was examined; nothing abnormal was found. The child bore the operation well, and was only slightly sick afterwards. On July 5th he vomited again. The flap bulged considerably. The squint had disappeared, but these was marked nystagmus.

Second operation.—First stage, July 6th: the bone was removed from over the cerebellar region, leaving a bridge in the middle line. The dura looked healthy. On July 8th vomiting began, and continued till the next day, when the child died.

Presented by C. A. Ballance, Esq., 1906.

3834 A. A vertical section of the head of a child four days old, enlarged from hydrocephalus. The lateral ventricle is much dilated and communicated with that of the other side through a wide defect in the septum lucidum. The spinal cord in the neck is normal.

There was a large meningo-myelocele in the lumbo-sacral region, which ruptured during birth.

The right foot was in a position of equino-varus.

Presented by Henry Sturge. Esq., 1906.

A 4017. A young Sky-Lark (*Alauda arvensis*) fourteen days old. The neck is remarkably and symmetrically swollen from emphysema of the subcutaneous tissue, the escape of air having, possibly, followed rupture of one of the air-sacs.

Two other birds from the same nest were quite normal.

A photograph taken during life was presented with the specimen by the donor.

[Mounted in 5 % Formol solution.]

Presented by P. A. Willett, Esq.

4078 F. A piece of tattooed skin about three inches in chief diameter, which was excised during life. In two or three places the pale, smooth areas indicative of retrogression or scarring are recognizable.

The piece of skin was removed from a Lieutenant in the British Army, æt. 24. He was tattooed in Pretoria in May 1905. The whole of the mark without any other part of the skin, became

the seat of typical Lupus vulgaris. The loss was made good by a Thiersch's graft. Several other officers were stated to have been tattooed at the same time and by the same artist, but none of them suffered from lupus. When the patient returned to his regiment there was no sign of recurrence.

[Mounted in 50 % glycerine.]

Presented by A. Pearce Gould, Esq., 1906.

4086 c. A left finger which was amputated for carcinoma arising in connection with the effects resulting from the prolonged action of the X rays. On the dorsal aspect of the first phalanx the integument presents an oval ulcer about an inch in diameter, which, as shown by the section, is the surface of a carcinomatous growth invading the connective tissues over the extensor tendons. Histologically the carcinoma is of the squamous-celled variety.

From a gentleman, æt. 46, who first began to work systematically with X rays in 1897, since when his hands had been subject to almost daily exposure to the rays for a period of about seven years.

In 1899 he first noticed some loss of tactile sensation in the fingers of both hands; at the same time the skin of the dorsum of the hands became dry and scaly, and the hair fell out; the nails became hard and brittle.

In May 1903 a severe attack of dermatitis followed a prolonged exposure of the left hand to the rays; the skin on the back of the index and of the third and fourth digits being most seriously affected, and severely blistered.

The resulting ulcers on these fingers were four months in healing; the new skin was thin, showed numerous nævoid-looking petechiæ, and remained tender for some time. The nails were shed, and those replacing them were irregular and grew slowly. Warty patches appeared on the skin of the back of the second phalanx of the index and of second finger.

In December 1903, as a result of another unusually prolonged exposure, the skin of these digits was again blistered, and a small ulcer over the second phalanx of each resulted. The ulcer on the second finger healed, but that on the index persisted, and became the seat of severe pain, which was especially accentuated at night-time.

This ulcer never healed, and between May and September 1904 it gradually increased in area and depth.

In September the finger was amputated.

[Mounted in 50 % glycerine.]

Presented by A. Pearce Gould, Esq.

4121 E. The head of a Partridge.

From the vertex there projects a horn about an inch and a quarter in length. The horn, which is slightly curved forwards, is vertically striated, both externally and in the section, and fits closely onto the roof of the skull.

Presented by W. B. Tegetmeier, Esq., 1906.

A 4217. A vertical section of the undescended testicle of a Horse, removed during life. In its substance, anteriorly, immediately beneath the tunica albuginea, there has grown what microscopic examination proves to be a pure lipoma, about an inch in diameter.

The parts were partially divided in the recent state, the tension having in consequence displaced the anterior portion of the tumour and a border of testicular substance, through the tunica albuginea.

[Mounted in 50 % glycerine.]

Presented by F. Hobday, Esq., F.R.C.V.S., 1906.

4355 Q. An enlarged prostate gland which was removed by suprapubic operation. The parts removed comprise the lateral lobes, one of which is somewhat more enlarged than the other, and which together form a mass about two and a quarter inches in greatest, transverse diameter. In places the gland presents a lowly lobulated or tuberose surface, but elsewhere this is obscured by a more regular capsule. That this capsule is constituted by the attenuated peripheral tissue of the organ appears from the circumstance that in one spot, where two pieces of red glass rod have been run beneath it, it contains a group of deep brown prostatic calculi.

From a gentleman, æt. 56, in whom symptoms of prostatic enlargement had existed for about five years. Complete retention of urine followed a railway journey, four years ago, and a second time a year later. The patient had suffered from two attacks of epididymitis, and two of cystitis, there being much muco-pus in the urine.

At the date of operation he was entirely dependent upon the use of the catheter.

Presented by A. Pearce Gould, Esq., 1906.

4422 A. The anterior portion of a penis removed during life for the disease of the urethra shown.

For the whole distance, $1\frac{1}{4}$ inches (3 cm.), though not for the entire circumference of the canal, the mucous membrane is thickened, and has a somewhat coarsely papillary surface. The lesion, which, as seen in the section, is of an opaque white colour, and has a vertical "grain," ceases abruptly at the meatus, in the vicinity of which there is no macroscopic invasion of the deeper tissues. Towards the posterior end the growth has commenced to infiltrate the substance of the corpus spongiosum, and here it attains a thickness, in the section, of ·5 cm. or $\frac{3}{16}$ths of an inch. The new formation is nowhere ulcerated or necrosed.

The surface of the glans and the preputial mucosa are quite unaffected. A second portion of the corpus spongiosum, 1 cm. in length, was afterwards removed at the operation, to clear the disease.

The patient was a man fifty-four years of age, under the care of Dr. P. A. Lloyd, of Haverfordwest. About a year before being seen, he had passed some blood with his urine and had experienced some smarting during micturition; the blood would stain his linen between the acts. These symptoms lasted for a few days, and disappeared without treatment. Until May 1905 he observed nothing except that the urine was passed, he fancied, more forcibly than had usually been the case. He then noticed some discharge on his shirt, and was found to have some narrowing of the urethra. This was treated by the passage of sounds, commencing with No. 6, which was gradually increased to No. 10. The sound was passed at intervals of a week, and some hardness, which was perceptible just behind the glans, was thought to be diminishing. Early in Nov. 1905, he saw Mr. Stonham, and afterwards Mr. Butlin, who both advised that the urethra should be slit up, the growth examined, and if found malignant, that the penis and injured glands should be removed. On Nov. 6th, the anterior portion of the penis was removed by Mr. Lloyd, to whom the condition then seemed undoubtedly epitheliomatous. There was no history either of gonorrhœa or syphilis. The patient had for at least thirty years suffered from attacks of psoriasis of the nails, for which he had taken arsenic in considerable doses. The use of the remedy had led to irritation of the eyes.

(S. G. Shattock, Trans. Path. Soc. vol. lviii.)

[Mounted in 50 % glycerine.]

Presented by P. A. Lloyd, Esq., 1906.

4426 C. A pin which was extracted from the bulbous portion of the urethra of a young adult.

The foreign body was successfully removed by perineal section; its point which was directed outwards was embedded in the mucous membrane. The patient stated that he had passed a metallic tube down his urethra, and that the pin, which was in this, was left behind when he withdrew the tube. The presence of the pin was demonstrated before the operation by means of a skiagram.

Presented by A. Pearce Gould, Esq., 1906.

4456 B. The penis of a dog, from British New Guinea, the prepuce being everted. The whole of the mucosa of the latter is thickly covered with coarse polypoid growths.

On one side of the intrapreputial portion of the penis, the mucous membrane over an area about the size of a sixpence bears a similar growth, whilst in the neighbourhood of the preputial reflexion there are a certain number of minute discrete, hemispherical, or slightly pedunculated outgrowths representing the earliest stage of the more general condition.

There were no enlarged glands in the pelvis or abdomen; nor were there any signs of metastasis in the abdominal or thoracic viscera. During life the prepuce was swollen from distension, the skin having a shining appearance: from its orifice there dropped a thin, slightly opaque yellowish fluid.

The dog was a large reddish-brown, well-nourished adult, more stoutly built than the pure-bred native animal in general, and was doubtless of mixed breed, native and European. According to the natives the disease had existed amongst their dogs before the immigration of white men.

Presented by C. G. Seligmann, Esq., 1906.

4456 C. The penis and prepuce of a dog from British New Guinea, showing a condition similar to that in the foregoing, but in a more advanced stage. The whole of the mucosa of the prepuce and that over the root of the intrapreputial portion of the penis bears a prominent growth of closely set polypoid excrescences.

The tunica albuginea was thin and distended but nowhere ruptured; there were no adhesions between the layers of the

tunica vaginalis. The scrotum was swollen to about the size of the fist, and its surface shining from tension: the testes were found after death to be quite replaced by the new growth. There were enlarged glands in both groins, but no signs of metastasis in the viscera.

The dog, like the preceding, was of mixed native and European breed.

This specimen and the foregoing, together with specimen No. 4675 E showing similar disease of the vagina, were obtained from dogs seen by the donor, in the villages of Hanuabada and Kilakila in the Central Division of British New Guinea.

In all the three specimens referred to, the lesions, whether of the penis, testicles, or vagina, present similar histological features, and consist of a dense growth of polyhedral cells of uniform character, and in the closest apposition. None of the cells show any transformation to fibroblasts. Between the cells there run simple capillaries, and, here and there, a thin strand of connective tissue. In some specimens not a few of the cells show mitotic figures. There is a complete absence of polymorphonuclear leucocytes, of lymphocytes and plasma cells (Unna) in the growth, except at the surface, where this happens to be the seat of ulceration.

Presented by C. G. Seligmann, Esq., 1906.

A **4598.** Portion of a uterus in the muscular wall of which there is a tubercular infiltration which has led to a notable enlargement localized to an area about two and a half inches in diameter. Portion of the uterine cavity is shown in the preparation in close proximity to the lesion, but the mucosa in the plane of section does not appear to be involved, the lesion shown at the upper part being apparently artificial.

The uterus was removed from an unmarried lady, æt. 46, who had been suffering from menorrhagia for two and a half years, which latterly had become very profuse and long-continued. The body of the uterus, enlarged and rounded, could be felt in the hypogastrium. The cervix uteri was normal. A submucous fibromyoma was diagnosed.

At the operation the uterus was found to have contracted firm adhesions to the rectum and bladder. The ovaries and Fallopian tubes were small; these were left. Recovery was uneventful. On examining the parts after removal, a rounded mass was found projecting from the anterior wall towards the uterine cavity. The disease extended into the cornual recesses, and in these situations invaded the uterine wall and reached into the terminal sections of the Fallopian tubes. Microscopic examination showed the disease to have arisen in the mucosa; tubercle bacilli

were found in the lesions, which presented the usual histological characters of tuberculosis.

(J. Bland-Sutton, Trans. Obstet. Soc. vol. xlvii. p. 72.)

[Mounted in 50 % glycerine.]

Presented by J. Bland-Sutton, Esq., 1906.

4634 B. Portion of a uterus, the section being carried antero-posteriorly through the elongated and distorted uterine cavity.

In its wall there have grown two, almost spherical, fibro-myomatous tumours, one in front of, the other behind, the cavity. The upper (in the natural position of the parts, the anterior) is about three and a half inches in diameter. The lower, which is somewhat larger, is of a dull pink colour, more so towards the periphery, where many venous channels filled with blood may be recognized.

Microscopic sections show an extensive infiltration of red blood-corpuscles amongst the cells of the tumour which, however, do not exhibit evidences of necrosis.

The uterus was removed from an unmarried aged woman.

[Mounted in 50 % glycerine.]

Presented by J. Bland-Sutton, Esq., 1906.

4647 B. The calcified portion of a tumour weighing five and a half pounds, which was connected with the side of the uterus, by a pedicle about nine inches in length.

The mass is somewhat reniform and measures nine and a half inches in its chief axis. It presents a subdivided coral-like exterior, the interstices of which, before maceration, were occupied by softer tissue.

The tumour is probably a calcified subperitoneal fibro-myoma of the uterus furnished with an unusually long pedicle.

It was taken after death from an unmarried woman, sixty-four years of age, and occupied the lower part of the abdomen in which it produced a notable prominence.

The mass lay with the convex surface forwards; the pedicle was connected with the posterior concavity and was of relatively small size.

The patient had observed the growth of the tumour for at least thirty years: she had never suffered from any symptoms of pelvic obstruction or pressure.

Presented by G. Arbuthnot Robertson, Esq., 1906.

4664 E *a*. A uterus removed by vaginal operation.

In the posterior lip of the os externum there is a sharply punched out depression somewhat more than half an inch across, due to the ulceration of a squamous-celled carcinoma.

From a woman, æt. 46, who had had eight children and two miscarriages. She suffered from a slight vaginal discharge, but no hæmorrhage. For two years her menstrual periods had been irregular, and the amount of menstrual flow was gradually diminishing. Vaginal hysterectomy was carried out March 1904; no recurrence had occurred in May 1906.

The ulcer, as seen by the speculum, was granular on the surface, and bled readily when touched.

[Mounted in 50 % glycerine.]

Presented by Dr. F. J. McCann, 1906.

4664 G. A vertical section of a uterus. In connection with the mucosa there has grown a prominent carcinomatous tumour which distends the uterine cavity, and into the lowest portion of which extensive hæmorrhage has occurred.

Embedded in the uterine wall are several fibromyomata of different sizes. Two of them (shown at the back of the specimen) are opaque from necrosis, and peripherally calcified.

The unusual yellow colour of the necrosed tumours suggests that before necrosis they were the seats of hæmorrhage.

The uterus was removed in February 1906 from an unmarried lady, æt. 59. At the operation, a second discoidal growth, the size of the palm, was excised from the great omentum.

Two months later there was evidence of recurrence, and the patient died in June with secondary masses in the pelvis and abdomen.

[Mounted in 50 % glycerine.]

Presented by J. Bland-Sutton, Esq., 1906.

4673 A. A China candle-extinguisher, together with a calculus about an inch and a quarter in chief diameter, which were removed from the vagina of a woman sixty-three years of age. The interior of the foreign body is filled with material like that which forms the separate calculus; the three smaller pieces are, on one aspect, concave and polished, and have evidently been detached from the exterior.

The calculus lay beneath, and articulated with the deposit which fills the foreign body.

The patient, who was admitted into St. Thomas's Hospital under the care of Mr. Battle, March 1906, gave a history of constant trickling of urine from the vagina for six months previously. The incontinence was not complete, a small quantity of urine being retained and passed normally by the urethra, until three weeks before admission, when the foreign body was removed, after which the incontinence became complete.

When admitted, there was a large vesico-vaginal fistula with thickened edges. An attempt was made to close the fistula with stitches, after cauterisation of the edges. Leakage of urine, however, still occurred from the vagina, and on April 3rd a further operation was carried out. The stitches which had been put in to close the lower part of the fistula were removed. The vaginal mucosa, about two inches from its lower end, was dissected up for about an inch, the canal itself being then closed with a double row of silk sutures, the vagina being thus converted, functionally, into an extension of the bladder.

April 13th: the stitches were removed. There was no leakage from the vagina, but some incontinence per urethram.

The patient was discharged on April 20th, the incontinence being in process of disappearance.

Presented by W. H. Battle, Esq., 1906.

4675 D. A somewhat oval tumour nearly three inches in its longer, vertical axis, which was removed from the vagina, portion of the anterior wall of the latter being removed with it. At its lower part the growth projects through the mucous membrane.

The tumour was removed from a woman æt. 32. She had suffered from a vaginal discharge for six months; the growth protruded through the vulva.

Histologically it was classed by the donor as a fibro-myoma.

Presented by Dr. F. J. McCann, 1906.

4675 E. The vagina with the bladder and urethra, and terminal portion of the rectum, of a dog, from British New Guinea.

For a distance of about two and a half inches the vagina is the seat of a diffuse new growth of close homogeneous texture, and, where thickest, about five-eighths of an inch. The growth does not form a strictly continuous mass, but consists of a series of excrescences of varying area, some of which (towards the lower part) are of the close-set polypoid kind shown on the prepuce of the two specimens, Nos. 4456 B & 4456 C. The new formation does not invade the urethra or rectum.

During life it protruded from the vulva, the skin in the neighbourhood of which is undermined and ulcerated.

On slitting up the uterus, the body was found full of bloody mucus; from the interior there grew a separate tumour about the size of a split haricot. There were enlarged glands on each side of the abdomen beneath the superficial fascia, between the groin and mid-line of the body. There were no metastases in the lungs, liver, pancreas, spleen or kidneys. The kidneys showed a number of minute subcapsular cysts, and near each kidney there were certain whitish masses, apparently enlarged lymphatic glands.

The dog was of mixed native and European breed. The specimen, together with Nos. 4456, B, C showing similar disease of the prepuce, were obtained from dogs seen by the donor, in the villages of Hanuabada and Kilakila in the Central Division of British New Guinea.

In all the three specimens referred to, the lesions, whether of the penis, testicles, or vagina, present similar histological features, and consist of a dense growth of polyhedral cells of uniform character and in the closest apposition. None of the cells show any transformation to fibroblasts. Between the cells there run simple capillaries, and, here and there, a thin streak of connective tissue. In some specimens not a few of the cells show mitotic figures. There is a complete absence of polymorphonuclear leucocytes, of lymphocytes and plasma cells (Unna) in the growth, except at the surface where this happens to be the seat of ulceration.

Presented by C. G. Seligmann, Esq., 1906.

4695 N. A left Fallopian tube in which twin pregnancy has occurred.

The amniotic sac, which is single, contains two embryos, each about three-quarters of an inch in length, attached by separate umbilical cords. An extensive extravasation of

blood has occurred between the membranes and the wall of the distended Fallopian tube.

At the back of the specimen, a piece of white glass has been inserted into the divided uterine end of the tube ; the fimbriated extremity is not recognizable.

The parts were removed from a patient thirty-five years of age, who had had one child ten and a half years previously.

She had missed two monthly periods before she was seized with sudden pain, faintness, and vomiting. At the operation, the abdomen was found to contain a large amount of dark fluid blood and clot. There was no history of twin pregnancy in the patient's family.

[Mounted in 50 % glycerine.]

Presented by Dr. F. J. McCann, 1906.

4792 D. Portion of a breast, including the nipple. A considerable area is infiltrated with what microscopic examination shows to be a spheroidal-celled carcinoma.

Embedded in the centre of the malignant growth there is a small ovoidal adeno-fibroma, 1 cm. ($\frac{5}{8}$ths inch) in chief diameter. The central tumour is quite distinct from the carcinoma, and has been partly raised to show its circumscription. Histologically it presents the structure of a markedly fibrous adenoma, the stroma of which has in places undergone calcification ; the carcinomatous growth reaches to the very capsule of the benign growth.

From a lady, æt. 57, who gave a clear history of having noticed a tumour in the breast when she was a young woman, and which was " dispersed by applications."

[Mounted in 50 % glycerine.]

Presented by Jonathan Hutchinson, Esq., Jun., 1906

4926 A. The liver of a young rabbit which was shot. The organ is much enlarged and its surface blotched with whitish areas, many of which are slightly raised above the general level. The section displays a series of ill-defined somewhat circular lesions of a paler colour than the rest of the

hepatic tissue, scrapings of which contained large numbers of coccidia (Coccidium oviforme).

[Mounted in 50 % glycerine.]

Presented by G. H. Morrell, Esq., M.P., 1906.

4940. A slice from the liver of a rabbit. The section is riddled with small cavities, due to the formation of gas in its vessels, a condition sometimes known as "foaming liver."

Of a pure culture of *Bacillus aerogenes capsulatus*, 2 c.cm. was injected into the auricular vein. Two minutes later the animal was killed, and the body then placed in an incubator at 22° C. for twenty-four hours. The animal at that time was about twice the original size. The subcutaneous tissue was emphysematous, and there was a large quantity of free gas in the peritoneal cavity. Gas was present in the blood-vessels throughout the body. All the viscera were "foaming," but especially the liver, spleen, and kidneys.

(L. S. Dudgeon and P. W. G. Sargent, Trans. Path. Soc. vol. lvi. p. 50.)

Presented by L. S. Dudgeon, Esq., 1906.

TERATOLOGY.

223 A. The anterior portion of a male rabbit showing a condition of facial arrest similar to that shown in many of the foregoing specimens. There is no indication of an eye. A proboscis half an inch in length projects above a horizontal depression, indicating the position of a buccal opening, although nothing can be passed from the exterior through it. *Purchased*, 1906.

499 A. A duplicated feather from the wing of a fowl (Buff Orpington). The free portions of the doubled parts are quite separate, but at the attached ends the shafts are lightly adherent for a distance of about half an inch, the line of apposition being clearly indicated by a fine longitudinal groove which is traceable to the very end of the

specimen. One of the parts is slightly larger than the other.

Presented by A. C. Farrington, Esq., 1906

518 B. The right foot of an infant in which the two outer digits are wanting, the absence of these being associated with absence of the fibula. The great toe is normal; the two succeeding digits are partially conjoined.

The lower end of the tibia has been shown by dissection; on the outer aspect it is smoothly rounded and covered with periosteum; there is no trace of a fibula.

The foot was amputated from a female child nine weeks old (July 1905).

A skiagram showed the absence of fibula, and the presence of three metatarsal bones only. There was in addition a congenital angular deformity of the right tibia; over the summit of the convexity the skin was dimpled and adherent to the subjacent bone.

The other foot was in a position of varus; this deformity was corrected by operation.

There were five other children in the same family, none of whom presented any malformations.

Presented by H. H. Clutton, Esq., 1906.

518 C. The right manus of a Chimpanzee, showing what are probably congenital defects in the bones.

The free portion of the fourth digit is represented only by the base of the first phalanx. All the bones of the index are diminutive, the first phalanx being almost suppressed, as it is in the fourth: the osseous nodule which represents the bone articulates normally with the second phalanx, though it appears to have been but slightly, if at all, connected with the head of the metacarpal.

Purchased, 1906.

550 A. The cæcum with the vermiform appendix and portions of the ileum and colon of a new-born child.

The large intestine which is empty and so contracted as not to measure more than ·4 cm. in transverse diameter, arises in a correspondingly contracted cæcum furnished

with an appendix of normal length. The cæcum is connected with the small intestine (which is much dilated) by a short isthmus of tissue not more than ·4 cm. in diameter, but there is no trace of any communication between them.

From a new-born child the subject of vomiting and absolute constipation. The rectum and anus were found to be normally developed. Abdominal section was carried out and an ileo-colic anastomosis made. Death took place forty hours later.

Presented by B. G. A. Moynihan, Esq., 1906.

582 A. The heart of a child which lived fifty-four hours after birth.

The foramen ovale is unclosed anteriorly so as to leave a free communication between the auricles in front of the anterior concave edge of the valve.

From the time of birth the child was blue and breathed rapidly.

Presented by Henry Sturge, Esq., 1906.

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